

PATENT

Atty. Dkt. No. NVDA/P000765

**IN THE CLAIMS:**

Please amend the claims as follows:

1. (Currently Amended): A system for uploading frame data to system memory, the system comprising:

a CPU coupled to the system memory and configured to execute an application program,[[; and]]

the CPU executing a Transmission Control Protocol (TCP) stack which includes code to complete at least some TCP processing;

a hardware subsystem configured to process frames related to one or more connections delegated by the TCP stack to produce frame data and upload the frame data to a portion of system memory allocated to the application program; and

the system memory including a connection table (CT) storing data for all active connections with system including delegated connections.

the hardware subsystem being further configured to request legacy processing by the TCP stack of any of the frames of the delegated connections.

2. (Original): The system of claim 1, wherein the frame data is payload data.

3. (Original): The system of claim 1, wherein a TCP Stack provides the hardware with a physical address corresponding to a user buffer.

4. (Original): The system of claim 1, wherein the hardware is configured to process frames to produce partially processed frame data and upload at least a portion of the partially processed frame data to a legacy buffer.

5. (Original): The system of claim 4, wherein the legacy buffer is stored in a portion of system memory allocated to a software driver.

6. (Original): The system of claim 2, wherein the hardware is configured to upload at least a portion of the payload data to a legacy buffer.

Page 2

491583\_1

## PATENT

Atty. Dkt. No. NVDA/P000785

7. (Original): The system of claim 6, wherein the legacy buffer is stored in a portion of system memory allocated to a software driver.
8. (Original): The system of claim 6, wherein a software driver provides the hardware with a tag corresponding to a location of the legacy buffer.
9. (Original): The system of claim 7, wherein the hardware is configured to transmit the tag to the software driver.
10. (Currently Amended): A method of uploading frame data including Transmission Control Protocol (TCP) payload data to system memory, the method comprising:  
processing a frame to produce frame data; [[and]]  
uploading the frame data to either a portion of system memory comprising a user buffer allocated to an application program or a legacy buffer in the system memory for separate TCP processing by a TCP stack executing on a CPU, depending on whether the user buffer is available.
- 11 – 16 (Cancelled)
17. (Original): A method of uploading frame data to system memory, the method comprising:  
processing a frame to produce payload data;  
uploading the frame data to a portion of system memory allocated to a software driver;  
and  
transmitting a tag to the software driver.
18. (Original): The method of claim 17, wherein the portion of system memory is a legacy buffer.
19. (Original): The method of claim 18, wherein the tag corresponds to a location of the legacy buffer in system memory.
20. (Original): The method of claim 17, wherein the tag is assigned to a legacy buffer by the software driver.

PATENT

Atty. Dkt. No. NVDA/P000785

21. (New): The system of claim 1 wherein the hardware is configured to pause incoming frame data to determine whether a frame is invalid , the invalid frame being stored in the legacy buffer for legacy processing.

22. (New): The system of claim 4 wherein the TCP stack is configured to process the frame data up loaded to the legacy buffer by the hardware.

23. (New): A method as claimed in claim 10 further comprising:

utilizing hardware separate from the CPU which does the TCP processing to partially process the frame and determine whether the frame was delegated by the separate TCP processing.

24. (New): A method as claimed in claim 23 wherein the TCP stack completes processing of the partially processed frame stored in the legacy buffer.

25. (New): A method as claimed in claim 24 wherein the partial processing of the frame produces partially processed frame and header data.

26. (New): A method as in claim 10 wherein the user buffer is defined as not available when the processed frame portion exceeds a start up limit value associated with the delegated connection carrying the frame being processed.

27. (New): A method as in claim 10 wherein the uploaded frame data includes TCP payload data